

New England Ratepayer Advocate Summit

September 17, 2008

Cambridge, MA

Richard Steeves. Vice Chair

Connecticut Energy Efficiency Fund

c/o Office of Consumer Counsel

10 Franklin Square New Britain, CT 06051

(860) 827-2912

CTSavesEnergy.org

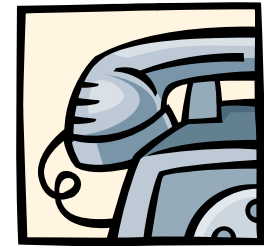


What Is the OCC?

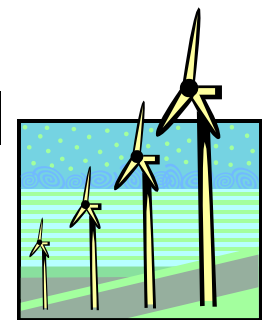
- Office of Consumer Counsel
- Mary J. Healey, Consumer Counsel
- 10 Franklin Square
- New Britain, CT 06051
- (860)827-2900
- <http://www.ct.gov/occ/site/default.asp>
- OCC: Member of ECMB, CEAB, NEPOOL, NERC, CERC, NASUCA, CCEF



THE OCC MISSION



- OCC is an independent state agency with statutory responsibility to represent customers of Connecticut's five regulated utilities – electric, gas, water, telephone, and cable television, primarily in matters before the Department of Public Utility Control (DPUC) (and also at FERC).





The Mission of the Energy Conservation Management Board is to advise and assist the utility distribution companies in the development and implementation of comprehensive and cost-effective energy conservation and market transformation plans. (as per Sec 33(d), PA 98-28, An Act Concerning Utility Restructuring)



Stakeholder Buy In

The Business Community (4)

State Agencies (3)

Low Income Representation (1)

Environmental Community (1)

Utilities (5)

**Initially, Many Were on “Opposing” Sides
But Have Coalesced On C&LM**

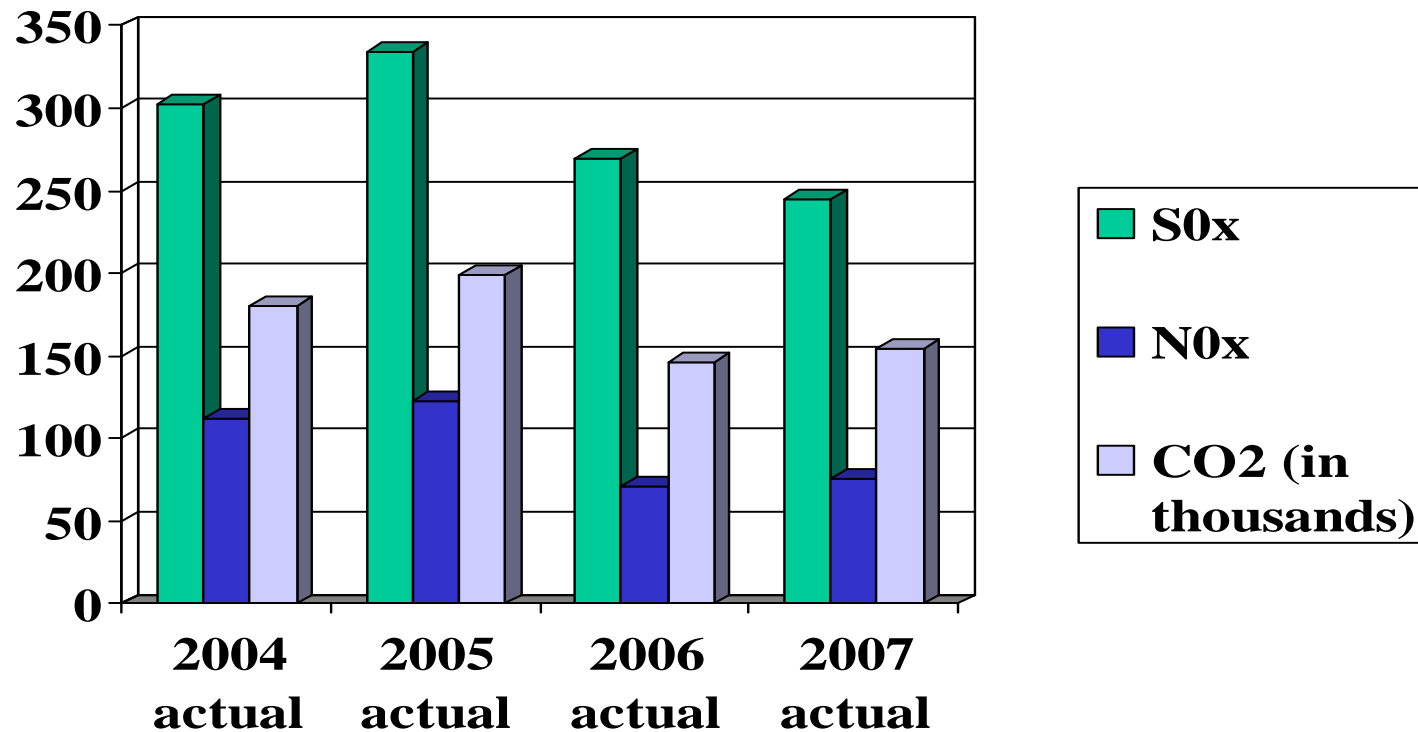
2007 CEEF Program Results

(CL&P and UI combined)

- **2007 lifetime energy savings – 4.3 Billion kWh**
 - (350M kWh annual savings)
 - \$780M saved in electric energy costs (Lifetime from 2007 investments)
 - (~\$63M saved annually)
 - Every dollar spent in 2007 on conservation programs will generate ~\$4 in future lifetime savings

Environmental Benefits

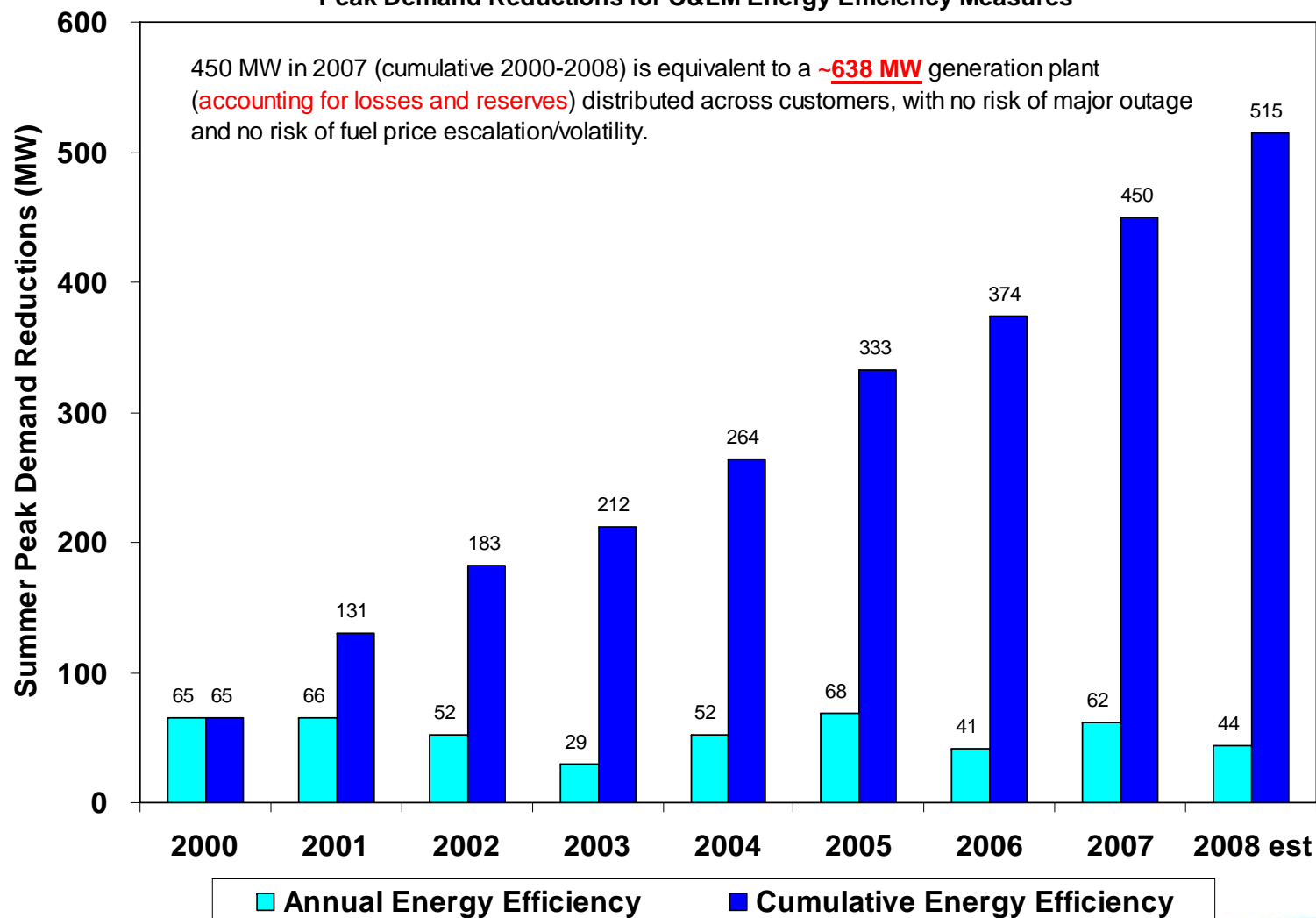
(CL&P Reductions in tons of pollutants)



Note: 2006 decrease due to a 33% budget cut.

Cumulative Energy Efficiency Summer Peak Demand Reductions

Peak Demand Reductions for C&LM Energy Efficiency Measures



Courtesy of ECMB

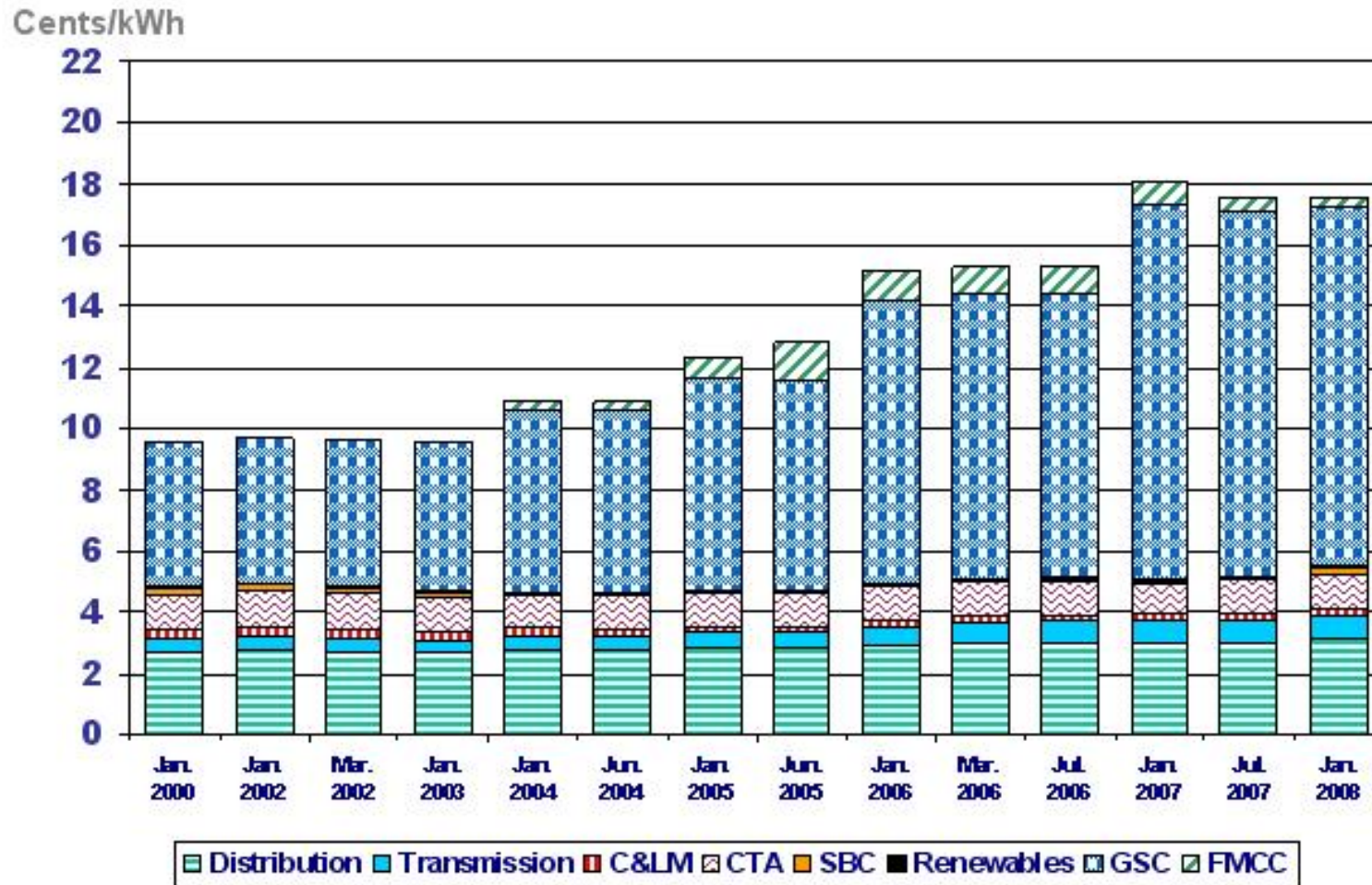
Why the CEEF Programs Are Successful?

- **Electric Price Increases (~\$0.18/kWh Residential)**
- **Availability of Programs for All Sectors**
- **Continual Improvement/Holistic Approaches**
- **Early Intervention**
- **Marketing**
 - Program Specific
 - General Awareness

Why Are Costs Rising?

- ❖ The purchase price of energy
 - ❖ Utilities do not own electric generation facilities
 - ❖ They purchase electricity from suppliers
 - ❖ The cost of the oil, coal and natural gas used to produce electricity has increased dramatically

CL&P & UI Average Electric Rates, 2000 - 2008





**Environment
Northeast**

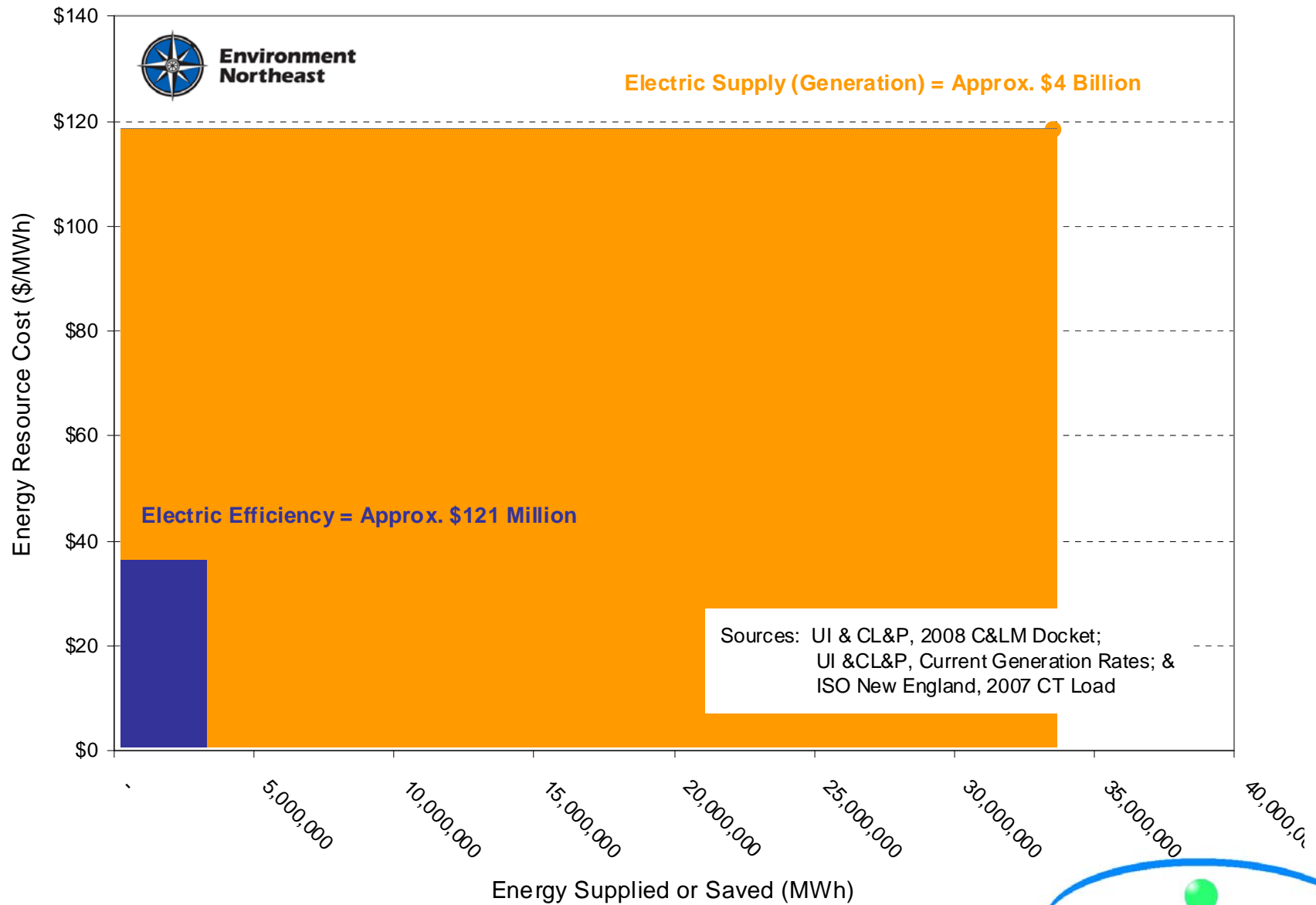


Exhibit ES-1 Relationship of ISO New England Electric Price and Natural Gas Price

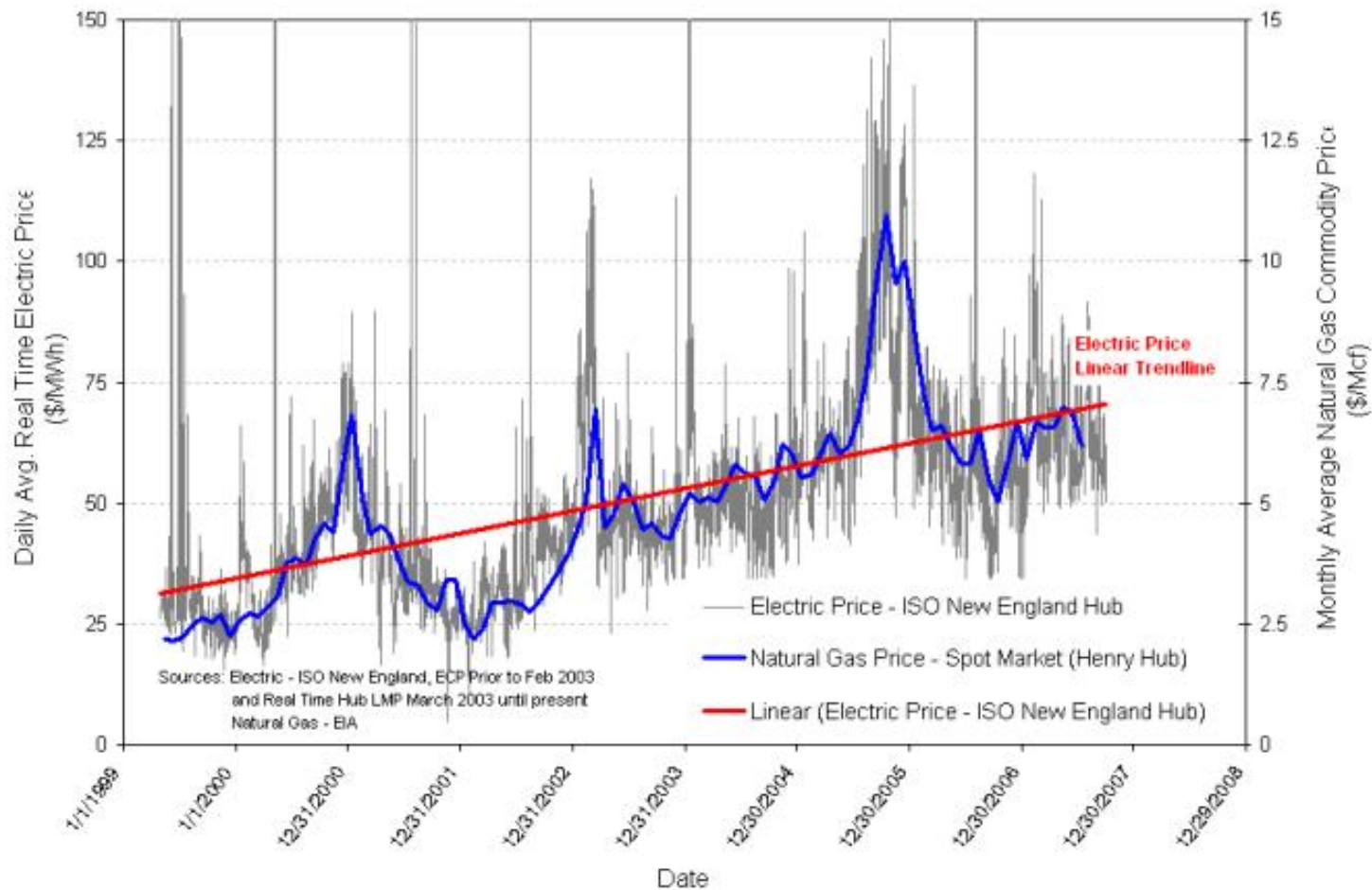


Exhibit 8			
Connecticut's 1% and 2% Highest Hourly Loads			
(88 Hours & 176 Hours, Respectively)			
	<u>2005</u>	<u>2006</u>	<u>2007</u>
1% of Hourly Loads Exceed	6341 MW	6161 MW	5952 MW
% of Annual Energy in top 1%	1.7%	1.8%	1.7%
% of Annual Costs in top 1%	3.1%	4.3%	2.9%
Average Price* (Day Ahead + Real-Time component \$)/MWh	\$160.58	\$171.29	\$132.90
% of top 1% Price Hours in top 1% Demand Hours	28%	52%	36%
2% of Hourly Loads Exceed	6050 MW	5733 MW	5568 MW
% of Annual Energy in top 2%	3.2%	3.4%	3.2%
% of Annual Costs in top 2%	5.4%	7.1%	5.0%
Average Price* (Day Ahead + Real-Time component \$)/MWh	\$144.45	\$151.27	\$119.58
% of top 2% Price Hours in top 2% Demand Hours	23%	60%	28%



**American Council for an
Energy-Efficient Economy**

Certificate of Recognition for *Exemplary Programs*

to

Energy Conscious Blueprint Program

In recognition of its success and effectiveness in helping customers realize greater levels of energy efficiency. This program has yielded significant economic and environmental benefits through the energy savings it has achieved.

Connecticut Light & Power
Connecticut Energy Efficiency Fund

Are commended for this high quality program which is hereby recognized as an exemplary energy efficiency program by the American Council for an Energy-Efficient Economy in our 2007 national review.

Steven Nadel, ACEEE Executive Director

October 2, 2007



**American Council for an
Energy-Efficient Economy**

Certificate of Recognition for *Exemplary Programs*

to

Energy Opportunities Program

In recognition of its success and effectiveness in helping customers realize greater levels of energy efficiency. This program has yielded significant economic and environmental benefits through the energy savings it has achieved.

Connecticut Light & Power
Connecticut Energy Efficiency Fund

Are commended for this high quality program which is hereby recognized as an exemplary energy efficiency program by the American Council for an Energy-Efficient Economy in our 2007 national review.

Steven Nadel, ACEEE Executive Director

October 2, 2007



**American Council for an
Energy-Efficient Economy**

Certificate of Recognition for *Exemplary Programs*

Honorable Mention

to

PRIME Program

In recognition of its success and effectiveness in helping customers realize greater levels of energy efficiency. This program has yielded significant economic and environmental benefits through the energy savings it has achieved.

Connecticut Light & Power
Connecticut Energy Efficiency Fund

Is commended for this high quality program which is hereby selected for *honorable mention* by the American Council for an Energy-Efficient Economy in our 2007 national review of energy efficiency programs.

Steven Nadel, ACEEE Executive Director

October 2, 2007



**American Council for an
Energy-Efficient Economy**

Certificate of Recognition for *Exemplary Programs*

Honorable Mention

to

Home Energy Solutions Program

In recognition of its success and effectiveness in helping customers realize greater levels of energy efficiency. This program has yielded significant economic and environmental benefits through the energy savings it has achieved.

Connecticut Light & Power
Connecticut Energy Efficiency Fund

Are commended for this high quality program which is hereby selected for *honorable mention* by the American Council for an Energy-Efficient Economy in our 2007 national review of energy efficiency programs.

Steven Nadel, ACEEE Executive Director

October 2, 2007

Residential: Home Energy Solutions

- Energy-saving program for existing homes
- Highly coordinated program administered by Connecticut's electric and natural gas utilities
- **“Energy audit” of home provides:**
 - Blower door-guided air sealing
 - Duct sealing
 - Water-saving measures
 - Direct installed lighting
 - Incentives for replacing old HVAC equipment and appliances

Home Energy Solutions

2007 Home Energy Solutions Program					
Customer Interest Form					
<p>The objective of the Connecticut Energy Efficiency Fund's Home Energy Solutions (HES) Program, administered by CL&P, is to reduce customers' total energy use through a comprehensive treatment of residential dwellings. HES will provide a complete energy assessment of your home, including heavy emphasis on HVAC systems, lighting, building shell measures, and early replacement of old, and inefficient appliances including HVAC systems.</p> <p>Because there is a potential of oversubscription and high customer participation, CL&P reserves the right to restrict marketing to homes that could benefit the most. This program is free for electric utility and natural gas utility customers only. ALL OTHER CUSTOMERS REQUIRE A \$200 CO-PAY (SUBJECT TO CHANGE BASED ON PROGRAM FUNDING). FILLING OUT THIS FORM DOES NOT AUTOMATICALLY QUALIFY YOU FOR THE HES PROGRAM. If your home is selected you will be notified via letter or telephone to participate in the HES Program. An authorized adult must be present during the assessment and provide access to the premises.</p> <p>Please fill out the following, based on what is <u>CURRENTLY</u> in your home.</p>					
CUSTOMER INFORMATION					
(PLEASE PRINT) First Name			Last Name		
Address					
City		State	Zip	Telephone Number	
INFORMATION					
Type of Home <input type="checkbox"/> Single Family <input type="checkbox"/> Condo <input type="checkbox"/> Duplex		Utility Account Number		Average Monthly Utility Bill	
				Electric \$ Gas \$	
Age of Home	Years	Square Footage of Home	Sq Ft	Central Air Conditioning	Age of Central A/C
				<input type="checkbox"/> Yes <input type="checkbox"/> No	Years
Duct Work Exposed		Heat Type		Fuel Type	
Attic <input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Forced Hot Air <input type="checkbox"/> Electric		<input type="checkbox"/> Gas <input type="checkbox"/> Oil	
Basement <input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Hot Water Baseboard <input type="checkbox"/> Other		<input type="checkbox"/> Electric <input type="checkbox"/> Propane	
Wall Insulation <input type="checkbox"/> Yes <input type="checkbox"/> No		Attic Floor Insulation <input type="checkbox"/> Yes <input type="checkbox"/> No		Basement Ceiling Insulation <input type="checkbox"/> Yes <input type="checkbox"/> No	
What is the R Value?		What is the R Value?		What is the R Value?	
Please Tell Us the Number and Age of ALL Appliances That Are Currently in Your Home.					
Number		Age		Number	
Refrigerator				Dehumidifier	
Dish Washer				Room A/C	
Washing Machine				Freezer	
SIGN HERE				Date: / / 2007	
Mail completed form to: Craig Clark, C&LM Department, Connecticut Light & Power, 66 Curtis Street, New Britain, CT 06052					

PF



Connecticut's Energy Efficiency Fund
Programs are funded by the Connecticut
E-Save-on customer bill.

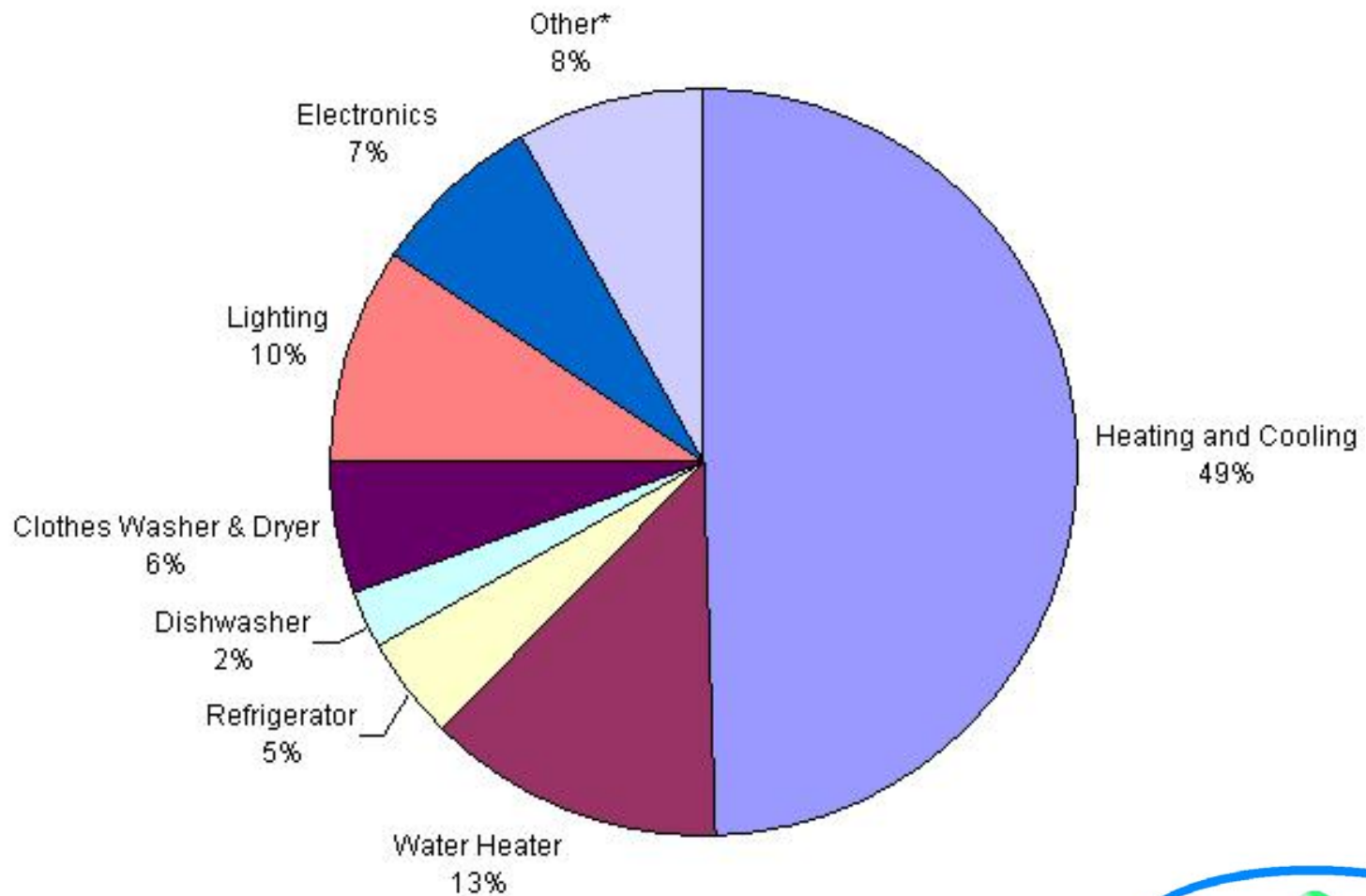


93072M



Where Does My Money Go?

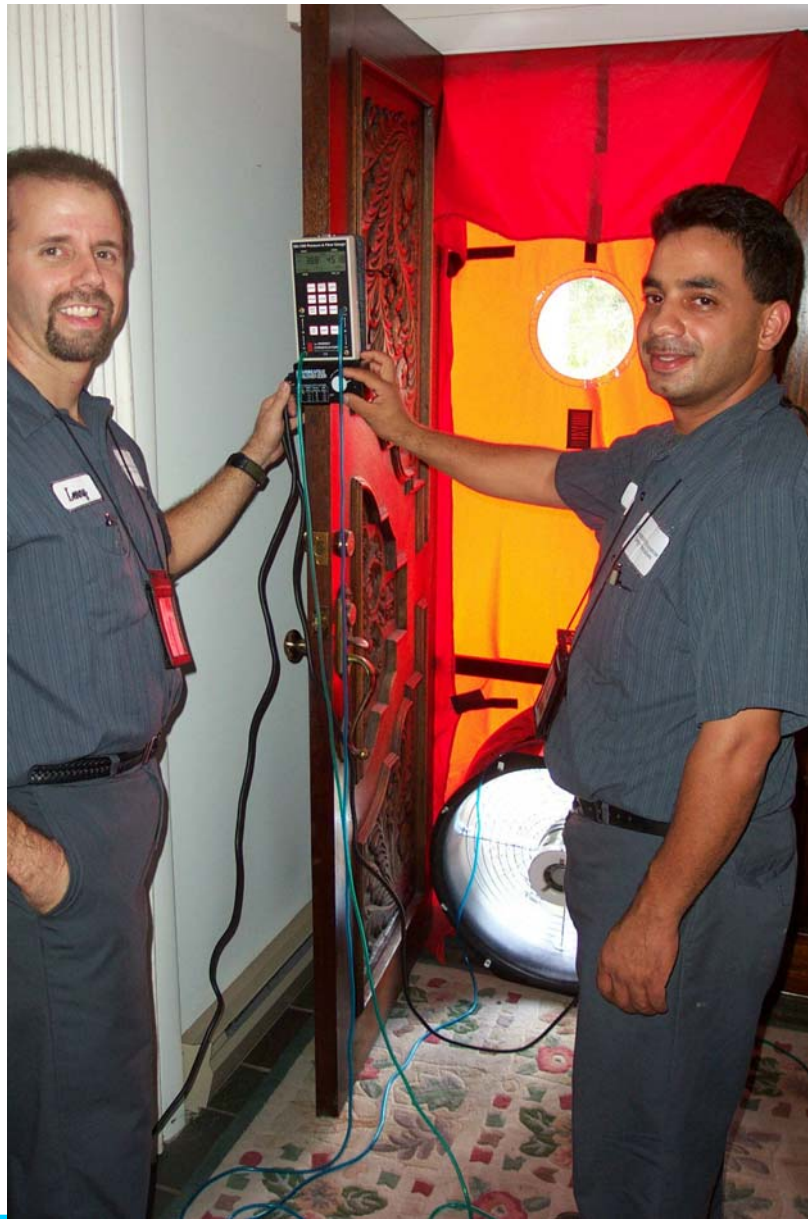
Annual Energy Bill for a typical Single Family Home is approximately \$1,900.



One Place to Begin is With the *Home Energy Solutions* Program













The Kill-a-Watt Device Comes With the Program



DISH A LITTLE BEFORE YOU DO THE DISHES.

By putting off doing your dishes until after 8 pm, you can help keep costs down for all. And only run full loads to make the most of that hot water.

It's Your Energy. Use It Wisely.

[More ways to save »](#)

Demand Side Management

```
graph TD; A[Demand Side Management] --> B[Demand Response (MW)]; A --> C[Energy Efficiency (MW & MWh)]; B --> D[Load Response]; B --> E[Price Response];
```

Demand Response (MW)

Load Response

Price Response

Energy Efficiency (MW & MWh)

Demand Response=Time Dependent Activities to:

Improve electric grid reliability

Manage electricity costs

Encourage load shifting/load shedding when the grid is near capacity or power prices are high

Demand Response Programs are designed to:

Offer clients incentives to curtail energy use

Provide reliable, predictable amount of power reductions

Typically require installation of software and hardware

Control client's electric power as needed during high use periods

Load Response

Load Response programs operate in response to requests for peak load reductions.

There is little, if any, discretion in compliance on the part of the customer.

The buyer or operator, directs load response programs.

Price Response

**Price response programs employ voluntary actions
in response to economic signals**

**Price response programs rely on wholesale clearing prices
as a signal to reimburse customers for their
participation**

Are much more likely to be voluntary

**Price Response and Load Response programs differ
as a matter of degree**



Additional Resources

[CTEnergyInfo.com Links Page](#)

[Warm Weather Tips](#)

[Appliance Tips That Can Lower Your Energy Bill](#)

[Smart Tips for Kids](#)

For Businesses

[Connecticut Energy Efficiency Fund: Energy Programs for Your Business](#)



MAKE THEM WORK THE NIGHT SHIFT

Wait 'til 8 pm to run any large appliance to help control costs for everyone, lower harmful emissions and reduce the strain on Connecticut's electric system to maintain reliability.

It's your energy. Use it wisely.

[Take the energy quiz »](#)



Access to Programs Takes Many Forms

Print Media (including newsletter)

Television

Literature

Numerous Web Site Pathways

Account Representatives

Community Action Agencies



CONNervation fund newsletter

Connecticut's energy efficiency programs

June 2008

New Ice Cream Cake Manufacturing Plant a Sweet Success Story for Energy Efficient Construction



Just one year ago, 263 Myrtle Street in New Britain was home to a vacant, derelict factory that sat on a polluted brownfield. Now that address can boast a new, 120,000 square-foot facility that is the new manufacturing plant and worldwide headquarters for Celebration Foods. Celebration Foods is the manufacturer and distributor of frozen desserts for several brands including Carvel®.

Celebration Foods participated with Connecticut Light & Power (CL&P) in the CEEF's new commercial construction program, Energy Conscious Blueprint. The program provides financial incentives that

On June 10, Governor M. Jodi Rell, New Britain Mayor Tim Stewart, DPUC Commissioner Jack Betkoski, Energy Conservation Management Board (ECMB) Chairman Richard W. Steeves, and representatives from CL&P joined Celebration Foods at a ribbon-cutting ceremony in front of the new facility. Commissioner Jack Betkoski presented a plaque to the company on behalf of the CEEF and CL&P acknowledging their commitment to energy efficiency.





PLUGGING YOU INTO CONNECTICUT'S ENERGY ANSWER CENTER



DID YOU KNOW?

That there are dimmable compact fluorescent lamps (CFLs)?
For More Information: [CFL dimmable and other styles](#)

Search Site:



Energy Efficiency

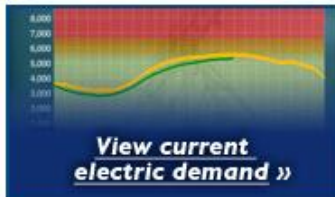
Green Buildings

Clean Energy

Energy Assistance

Energy Education

Project Funding



Ways To Lower Your

Welcome to CT Energy Info!

CTENERGYINFO was developed by [The Connecticut Department of Public Utility Control](#) in conjunction with [The Institute for Sustainable Energy](#) to assist consumers in locating information about energy-related subjects and the strategies that can be used to lower energy consumption and cost. Topics include Connecticut's Energy Efficiency Partners Program, Green Building Standards, Educational Programs, Clean Energy Options, Restructuring, Energy Assistance, Environmental Issues, Consumer Issues and much more. Please feel free to [contact us](#) with comments about the site or with ideas on how it can be improved.



www.CtEnergyInfo.com



[About the CEEF](#) | [Energy Programs](#) | [Energy Tips](#) | [News](#) | [ECMB](#) | [Partners](#)



Energy Programs

For Your Home

Incentives and rebates.

For Your Business

Small businesses to large.

For Your Town

Initiatives for communities.

Additional Programs

A wide variety of initiatives.

Recent News

Federal Tax Credits for Residential Energy Efficiency



That's the thinking behind the Connecticut Energy Efficiency Fund, an initiative designed to make it easy for residents and businesses get in the habit of using energy more efficiently - to save money, energy and the environment.

www.ctsavesenergy.com



FOR HOME FOR BUSINESS



**Connecticut
Light & Power**

The Northeast Utilities System

Energy for a Changing World™



CONTACT US

✉ Email Us | Contact Us Page

📞 (860)947-2000 | (800)286-2000

ABOUT CL&P

YOUR ACCOUNT

CUSTOMER SERVICE

SAVE ENERGY & MONEY

IN THE COMMUNITY

SAFETY

For Home / Save Energy & Money

SAVE ENERGY & MONEY

Who Benefits? We All Do!

You can take control of your energy future by using electricity more efficiently. The energy experts at CL&P can help you get started. We offer do-it-yourself tips, [home services](#), [rebates](#) for energy-efficient appliances and HVAC equipment, programs for [children](#) and [teachers](#), and community [events](#) for the whole family.

You can save energy and money, and you will have a positive impact on the environment

[What is the Connecticut Energy Efficiency Fund?](#) Learn about how Connecticut is saving energy and how you are already a part of the solution.

[Home Services and Rebates:](#) Learn about programs that will make your existing home or your dream home more energy efficient. Purchasing cooling, heating or water heating equipment? You may qualify for a cash rebate. Interested in ENERGY STAR® products? These pages will get you the information you need.

SAVE ENERGY & MONEY

Home Services and Rebates
Tools, Education and More
Community Events and Energy
Fairs
Going Green
About CEEF

QUICK LINKS

Pay Your Bill
Start or Stop Service
About Your Bill
Rates and Tariffs
Electric Suppliers

SITE TOOLS

🖨️ PRINT

✉️ EMAIL

🔍 TEXT SIZE + -

SHARE 📱 🌐 📧 📧 📧


SEARCH

• [What Does it Cost
Brochure](#) [:0 KB]

www.cl-p.com/Home/SaveEnergy/default.aspx




[LOG IN](#)



The United Illuminating Company

[OIL HOLDINGS](#)
[ASK UI](#)
[CAREERS](#)



[Home](#) [About UI](#) [Your Home](#) [Your Business](#) [Customer Care](#) [My Account](#)

[- Your Home > UI Products & Services > Home Energy Solutions](#)

Your Home

[Energy Saving Tips & Tools](#)

[UI Products & Services](#)

[Water Heater Lease](#)

[Financial Assistance](#)

[Geothermal Heat Pumps](#)

[Heating and Cooling](#)

[Surge Protection](#)

[Energy Star Products](#)

[Energy Star Homes](#)

[Home Energy Solutions](#)

[HES Application Form](#)

UI Helps

[Customer Care](#)

[Information Request](#)

Home Energy Solutions

This comprehensive program is free to all customers who heat their homes with **electricity** or **natural gas***. The program may offer a full range of energy efficiency measures to address inefficient lighting, water heating, inefficient heating equipment, refrigeration and insufficient insulation. This service can help **lower your energy costs** with just one, in-home visit by a trained energy-efficiency team.

Target Customer

- All Gas and Electric customers with Central Air Conditioning
- Customers whose homes were built before 1990
- Customers who are high energy users
- Those customers willing to make energy-efficient upgrades to their homes

The Service Will Include:

- A Total Home Energy Assessment
- Rebates up to \$600 for qualified Central Air Conditioning systems
- Rebates totaling up to \$400 for replacing certain inefficient appliances

www.uinet.com/

www.WattsNewCT.com

Electric Restructuring

Keeping You Informed About Electric Restructuring In Connecticut

[Electric Choice](#) | [Clean Energy Options](#) | [Energy Efficiency](#) | [Rates/Choices](#) | [español](#)

Visit with the Watts New Team
across Connecticut

[Press Releases](#)

[Sign up for email notifications](#)

[Glossary](#)

[FAQs](#)

[Ask a Question](#)

[Links](#)

**Click here for
Connecticut's
energy related
web site**



You can switch



or not

WattsNewCT is an education campaign, created by the Connecticut Legislature and administered by the CT Department of Public Utility Control (DPUC), to inform electric consumers about electric competition and changes in the way you buy electricity. Connecticut's electric market is open to competition, giving you the power of choice. This means that most of you can choose the company that sells you your electricity.



www.wattsnewct.com



EE Going Forward for the Future

Our Best and Newest Options

- Deeper and broader, more comprehensive
- Save 30-70% in customer facilities, instead of 5-25% (as in many current programs)
- Near Zero net energy buildings for all new construction
- Voluntary programs unlikely to be enough; need increased codes, standards & mandates



Show Me the Money!

Annual Budget (\$ million) - CL&P and UI												
CL&P and UI												
		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
EE	Total EE	92.3	125.4	176.4	240.1	287.1	311.6	312.4	269.4	206.3	175.6	176.3
DR	Load Response	27.9	27.6	27.6	27.7	27.7	27.7	27.8	27.8	27.9	27.9	28.0
	Res. DLC	2.9	6.4	9.6	12.0	13.2	12.2	12.2	12.3	12.4	12.5	12.5
	Total DR	30.8	33.9	37.2	39.6	40.8	39.9	39.9	40.1	40.2	40.4	40.4
Total Budget		123.1	159.4	213.7	279.7	328.0	351.5	352.3	309.5	246.5	215.9	216.8
Revenues & Funding Sources												
Funding Sources	C&LM (3 mils) EE	81.4	92.0	92.2	92.4	92.6	92.8	93.0	93.2	93.4	93.6	93.8
	FCM EE	1.8	2.1	4.4	7.2	8.9	10.7	12.4	14.2	15.9	17.7	19.5
	Class III EE	2.3	4.5	6.0	6.0	6.0	5.9	5.9	5.9	5.9	5.8	5.8
	FCM DR*	27.9	27.6	27.6	27.7	27.7	27.7	27.8	27.8	27.9	27.9	28.0
Total Estimated Revenues		113.3	126.2	130.2	133.2	135.2	137.1	139.1	141.1	143.1	145.1	147.0
Difference (Budget - Revenues)		9.9	33.2	83.5	146.5	192.7	214.4	213.2	168.5	103.4	70.9	69.7
* FCM DR partially funded by FMCCs in 2007-2009												
2nd Total		123.1	159.4	213.7	279.7	328.0	351.5	352.3	309.5	246.5	215.9	216.8
Estimated Potential RGGI Revenues - C&LM Programs in CL&P and UI Service Territories (\$ million)											ECMB, 5/1/08	
Market Price \$ Per Short Ton		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Estimated Range	\$2.00		14	14	14	14	14	14	14	14	14	14
	\$5.00		35	35	35	35	35	35	35	35	35	35

Major Web Resources

www.ctenergyinfo.com

www.ctsavesenergy.com

www.cl-p.com/Home/SaveEnergy/default.aspx

www.uinet.com

www.wattsnewct.com

Diet Advice

“Eat food, mostly plants, not too much”

Michael Pollan, Writer

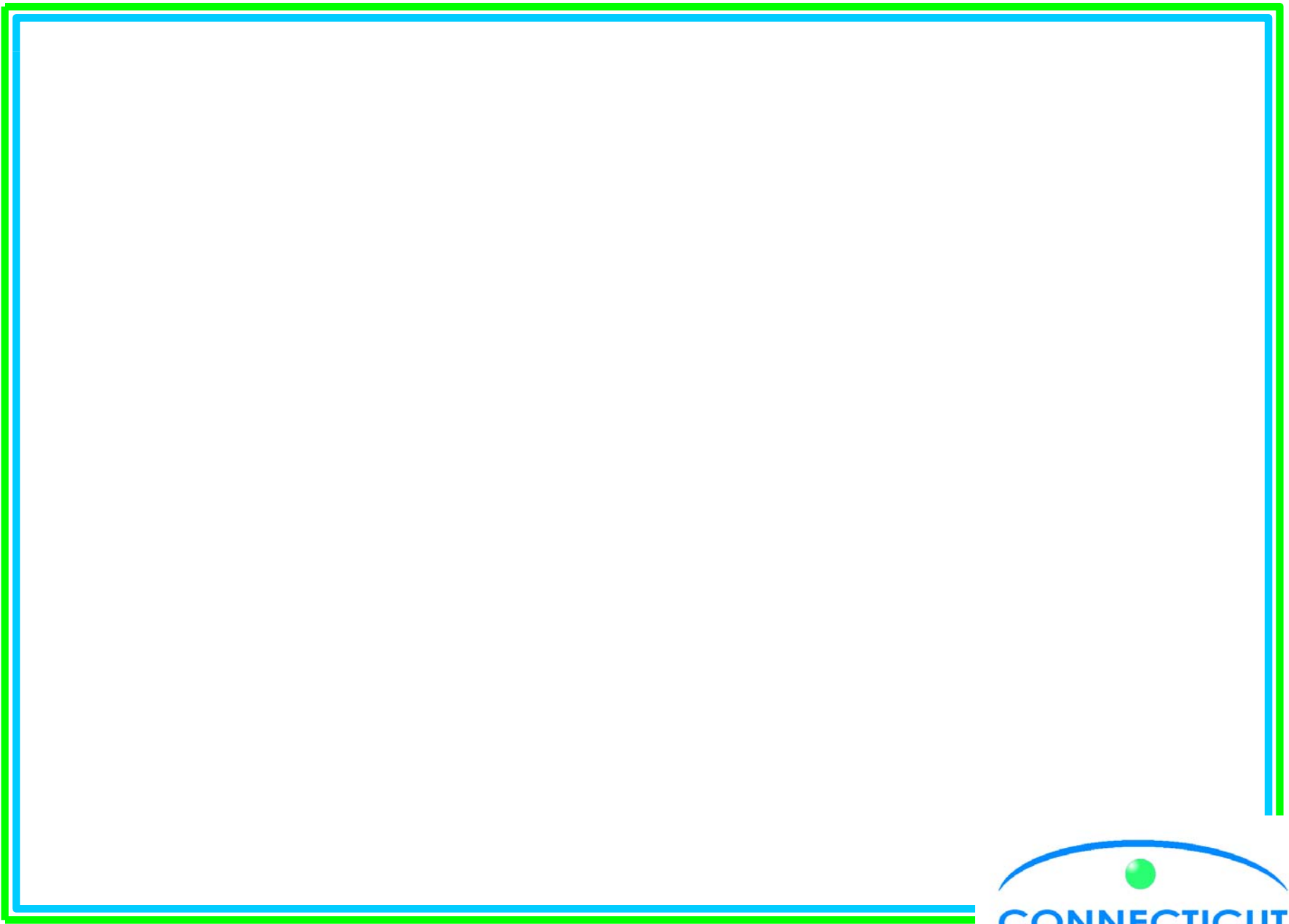
Energy Efficiency Advice

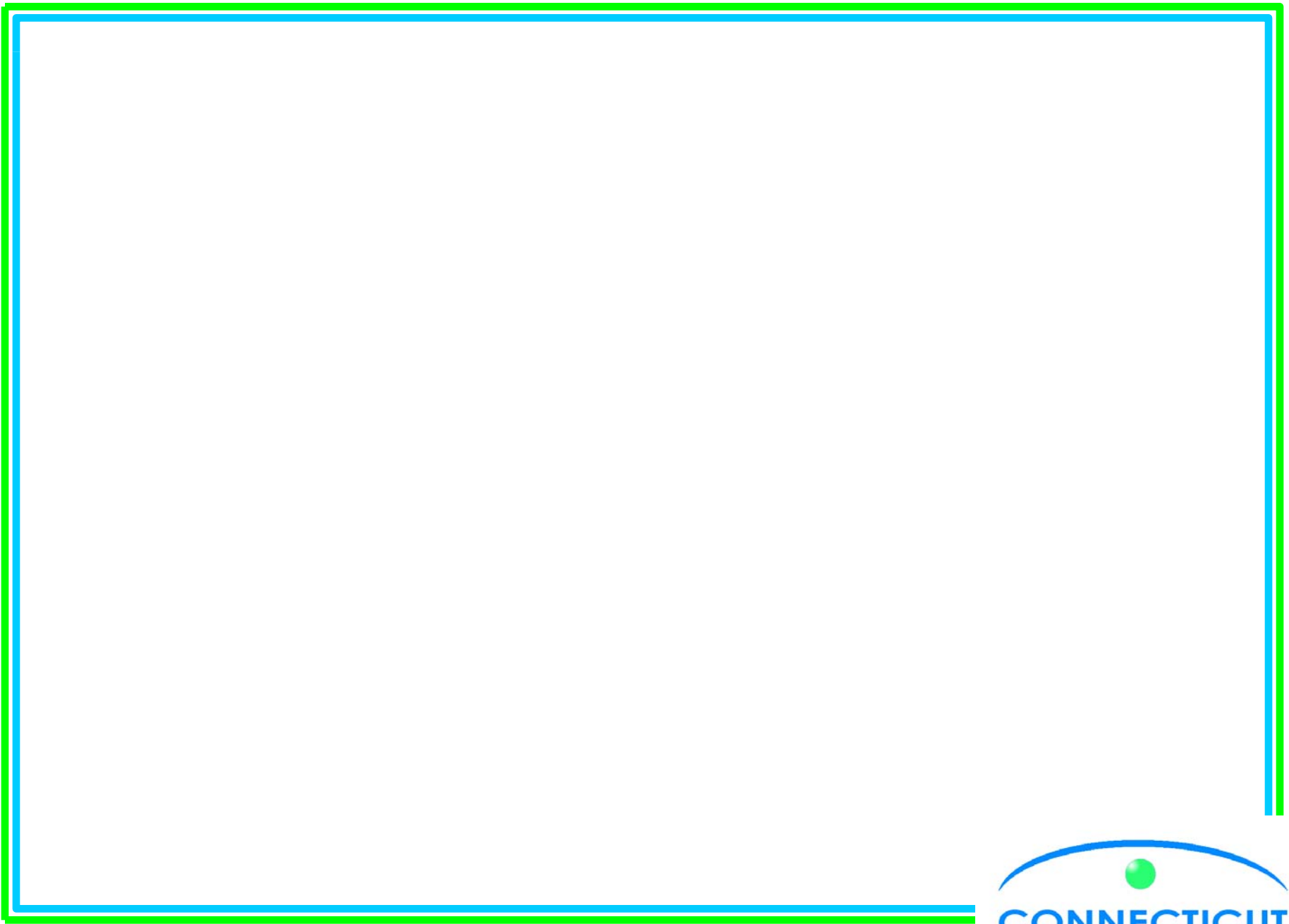
“Use energy, mostly renewables, not too much”

Richard W. Steeves

“We’re From the Government; We’re Here to Help You.”

- Office of Consumer Counsel
- Mary J. Healey, Consumer Counsel
- 10 Franklin Square
- New Britain, CT 06051
- (860)827-2900
- <http://www.ct.gov/occ/site/default.asp>





Help State's Businesses

Maybe Connecticut Light & Power Co. needs a lesson in fiscal discipline. But by short-changing energy-efficiency programs this spring, the state Department of Public Utility Control taught hundreds of Connecticut businesses that the state can't be trusted.

The programs, funded by a surcharge on electric bills and administered by CL&P and United Illuminating, provide free energy audits, equipment and low-interest loans to help businesses and residents control their energy costs. They also generate thousands of skilled "green" jobs and are nationally recognized for their effectiveness.

High energy prices and aggressive marketing of the programs created a powerful surge of interest in the past two years.

So much so that the demand pushed CL&P \$26 million over budget.

In an apparent attempt to impose fiscal discipline on CL&P, the DPUC authorized only \$11 million for the

program in June.

This meant that CL&P had to rescind its rebate offers to more than 600 businesses. Many had invested thousands of dollars in plans and staffing, expecting reimbursement.

The DPUC has a duty to make sure CL&P's spending toes the line. But its decision here fails to embrace the big picture.

Conservation is the cheapest, quickest and cleanest way to address the state's energy challenges.

Every dollar spent on efficiency saves up to \$4 in energy costs; it also reduces greenhouse gas emissions and other pollutants.

Partly because of high energy prices, business and homeowners around the state are seeing the light. The DPUC is now weighing another proposal from CL&P for \$15 million to expand the state's energy conservation programs. We hope the agency will see fit to fund these programs on a level equal to the demand.

**CONSERVING
ENERGY**
Why was
conservation
program
trimmed? DPUC
must encourage
efficiency